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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|------------------------|-----------------------------|------------------|
| 10/073,674 | 02/11/2002 | Christina Lampe-Ottend | 3243.1001-001 | 4577 |
| 21065 | 7590 | 06/03/2004 | EXAMINER RUTHKOSKY, MARK | |
| HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133 | | | ART UNIT 1745 | |

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

| | |
|-------------------------------|-------------------------------|
| Application No. 10/073,674 | Applicant(s) LAMPE-ONNERUD |
| Examiner Mark Ruthkosky | Art Unit 1745 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory maximum of thirty (30) days will be considered timely.
- IF NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 13-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☒ Claim(s) 1-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-945)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/10/02; 1/20/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements filed 6/10/2002 and 1/20/2004 have been placed in the application file, and the information referred to therein has been considered as to the merits.

Election/Restrictions

Claims 13-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made without traverse in Paper No. 3/15/2004.

Drawings

The drawings filed on 6/10/2002 have been approved.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims use the language "less than about" and "greater than about." These phrases are indefinite as "less than" and "greater than" define a clear end point to a range, which the claimed variable cannot exceed. The word "about" contradicts this defined end point. The

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word about indicates that the variable x (less than about 1.3 in claim 1 for example) can actually be greater than 1.3 or the variable y (greater than about 0.0 in claim 1 for example) can actually be equal to or less than 0.0. Phrases that include indefinite end points of this type are shown to be indefinite in section 2173.05 of the MPEP wherein the phrase "at least about" is held indefinite.

Further, claim 11 (which depends from claim 1) includes a composition, which does not include a representative for M'. M' is a positively recited limitation in the claim. Removing this element from a composition that requires the element is indefinite.

Claim Objections

Claim 11 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. M' is a positively recited limitation in the claim 1. Claim 11 does not include this element in the composition. Removing this element from the composition.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kitano (JP 2000-149,950.)

The instant claims are to a composition comprising a core with the formula,



as claimed, and a coating on the core having a greater ratio of Co:Ni than the core.

Kitano (JP 2000-149,950) teaches a composition comprising a core with the formula, $\text{Li}_x\text{M}'_z\text{Ni}_{1-y}\text{M}''_y\text{O}_2$ ($0 \leq y \leq 0.25$, $0 \leq z \leq 0.15$) with M being a metal excluding Ni and Co. Examples of metals used for the variable M include Mg and Mn. The material has a magnesium-cobalt-lithium coating on the core inherently having a greater ratio of Co:Ni than the core as no Ni is in the coating. For the purposes of examination, the use of the term "about" includes a range encompassed by the ranges of the reference. With regard to the rejections under 35 U.S.C. 112, the amount of each material does not appear to be necessary in each claim due to amounts of zero and thus, the reference reads upon the claim. Thus, the claims are anticipated.

Claims 1-5 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Toatsu (JP 09-50810.)

Toatsu (JP 09-50810) teaches a composition comprising a core with the formula, $\text{Li}_x\text{Ni}_y\text{N}_z\text{O}_2$ ($0.8 < x < 1.2$, $0.8 < y + z < 1.2$ and $0 \leq z < 0.2$) with N being a metal including Co. The material has a lithium-cobalt-oxide coating on the core including a small amount of nickel. The

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coating will therefore have a greater ratio of Co:Ni. For the purposes of examination, the use of the term "about" includes a range encompassed by the ranges of the reference. With regard to the rejections under 35 U.S.C. 112, the amount of each material does not appear to be necessary in each claim due to amounts of zero and thus, the reference reads upon the claim. Thus, the claims are anticipated.

Claims 1-5 and 7-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Koji (JP 11-067,209.)

Koji (JP 11-067,209) teaches a composition comprising a core with the formula, $Li_{x=0-1.2}Ni_{(1-b+c+d)}Co_{b=0-1.0}Mn_{c=0.05-0.4}M_{d=0-0.4}O_2$ with M being a metal including B. The material has a lithium-cobalt-oxide coating on the core. Nickel is not included. The coating will therefore have a greater ratio of Co:Ni. For the purposes of examination, the use of the term "about" includes a range encompassed by the ranges of the reference. With regard to the rejections under 35 U.S.C. 112, the amount of each material does not appear to be necessary in each claim due to amounts of zero and thus, the reference reads upon the claim. Thus, the claims are anticipated.

Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Ruthkosky whose telephone number is 571-272-1291. The examiner can normally be reached on FLEX schedule (generally, Monday-Thursday from 9:00-6:30.) If attempts to reach the examiner by telephone are unsuccessful, the examiner's

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supervisor, Patrick Ryan can be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free.)

Mark Ruthkosky
Primary Patent Examiner
Art Unit 1745



5/31/04